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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,924	02/27/2004	Craig S. Kickel	303.851US1	8884

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EXAMINER
LUDWIG, MATTHEW J

ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/789,924	KICKEL, CRAIG S.
	Examiner	Art Unit	
	Matthew J. Ludwig	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 06 October 2006.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,11-37,39-42 and 44-56* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 5-9, 11-37, 39-42, 44-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the amendment received 10/6/2006.

2.   Claims 1-56 are pending in the application. Claims 1, 19, 20, 22, 28, 34, 50, 51, and 53,

are independent claims. Claims 22-27 remain rejected under 35 U.S.C. 101 as being directed to

non-statutory subject matter. Claims 1-56 rejected under 35 U.S.C. 102(b) as being anticipated

by Tijare have been withdrawn pursuant to applicant's amendment.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

4.   **Claims 22-27 are rejected under 35 U.S.C. 101 because the claimed invention is**

directed to non-statutory subject matter.

In reference to claims 22-27, while defining a system to translate metadata from a database, the

system does not define the hardware (memory, computer processor, etc.) to provide a "concrete,

tangible result" and is thus non-statutory for this reason. A system can range from paper on

which the program is written to a program simply contemplated and memorized by a person. The

examiner suggests amending the claim to "computer-implemented system including a memory"

in order to make the claim statutory.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   **Claims 1-4, 5-9, 11-37, 39-42, 44-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tijare et al., USPN 6,950,815 filed (4/23/02) in view of Lipkin et al., Pat. Pub. 2005/0154699 filed (11/22/2004).**

In reference to independent claim 1, Tijare teaches:

The disclosed content management system has many advantages in terms of simplifying the user's task of writing queries. Viewing the CM system metadata as an XML document abstracts out the physical mapping of CM data model to relational database tables (compare to *"reading metadata for a database"*). See column 12, lines 1-15.

The CM data model set forth in the representations of Item Type Journal, Item Type Book, Item Type Conference, can be viewed as an XML document "LS.xml" with the following schema by applying the above described mapping rules (compare to *"translating the metadata into a page definition language"*). See column 6, lines 15-24.

The content manager system metadata, namely both system and user metadata are viewed as a single hierarchically structured document, such as an XML document (compare to *"outputting the page definition language"*). See column 4, lines 40-57.

The Tijare reference views CM system metadata as an XML document, however, the reference fails to explicitly state the metadata includes a constraint definition for at least one column. Lipkin provides constraint definitions that allow a user to read specific metadata based upon specific values. The constraint definitions are used within a business application that provides access to and partitions a number of business objects. It would have been obvious to

one of ordinary skill in the art, having the teachings of Tijare and Lipkin at the time the invention

was made, to modify the content management system of Tijare and include the constraints of

Lipkin, because it would have captured necessary metadata about the objects and simplified the

content stored and presented to the content management system.

In reference to dependent claim 2, Tijare teaches:

A tree based hierarchy of an Item Type, Journal, which is formed from multiple related

tables. Journal is the root component and includes the following attributes: Title, Organization,

Classification, Year, Publisher_Name. See column 3, lines 57-67.

In reference to dependent claim 3, Tijare teaches:

Tree based hierarchy of an Item Type, Book, which is formed from multiple related

tables. Book is the root component and includes the following attributes: Title and Year. See

column 4, lines 13-29.

In reference to dependent claim 4, Tijare teaches:

In implementation, an Item Type is composed of multiple relational or object-relational

database tables, each representing a component of the Item Type. An Item is composed of one

row from the database table representing the root component and zero or more rows from each of

the database tables. See column 3, lines 1-24.

In reference to dependent claim 6, Tijare teaches:

The disclosed content management system can be stored on virtually any computer-

readable storage media, in either compressed or non-compressed form. See column 12, lines 45-

57.

In reference to dependent claim 7, Tijare teaches:

To search on properties of an item, users would potentially need to either write very complex SQL query involving many complex join and/or union operations or make many complex API calls. See column 3, lines 25-44.

In reference to dependent claim 8 and 9, Tijare teaches:

The path expression in Xquery allow a high level expression of parent-child and ancestor-descendent relationships between components of an Item. It is also possible to write a single query for both data and metadata using the wild-card notation and descendent axis notation. See column 12, lines 5-30.

In reference to dependent claim 11 and 12, Tijare teaches:

The CM data model set forth in the representations of Item Type Journal, Item Type Book, Item Type Conference, can be viewed as an XML document "LS.xml" with the following schema by applying the above described mapping rules. See column 6, lines 15-29.

In reference to dependent claim 13 and 14, Tijare teaches:

The disclosed content management system has many advantages in terms of simplifying the user's task of writing queries. Viewing the CM system metadata as an XML document abstracts out the physical mapping of CM data model to relational database tables. See column 12, lines 1-14.

In reference to dependent claim 15-18, Tijare teaches:

Content management system includes a hierarchical data structure, repeating groups, link relationships and reference attributes. One goal of CM system is to abstract out the application data model and provide a high level query language for which it is both easy for client users to

·write queries and yet which can be efficiently executed by the system in a programming

language. See column 3, lines 45-56.

In reference to claims 19-33, the claims recite a system comprising computer executable

instructions for carrying out the similar methods claimed in 1-18. Therefore, the claims are

rejected under similar rationale.

In reference to claims 34-37, 39-42, 44-56, the claims recite a computer readable medium

having computer executable instructions for carrying out similar methods to those claimed in 1-

18. Therefore, the claims are rejected under similar rationale.

Response to Arguments

7.   Applicant's arguments with respect to claims 1-4, 5-9, 11-37, 39-42, 44-56 have been

considered but are moot in view of the new ground(s) of rejection.

        Applicant added newly formed claim language into the independent claims and thus

changed the scope of the claim when read as a whole. More specifically, the limitation 'reading

metadata for a dataset, the metadata including a constraint definition for at least one column'

changes the scope of the claim when read as a whole. The rejection has been adjusted

accordingly.

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew J. Ludwig whose telephone number is 571-272-4127.

The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML

STEPHEN HONG
SUPERVISORY PATENT EXAMINER